

Environmental Education Program Guide 2014-2015

In-Class Programs

All classroom programs are offered November though April unless otherwise noted.

Spiders Aaarrgghh! (*PreK*; 45 minutes) - Learn the body parts of spiders, basic web designs, how they catch food, and why they are important.

Snakes Alive (*PreK*; 45 minutes) - We often fear what we don't understand. Introduce your students to a live snake, and learn what makes snakes special.

Birds of A Feather (*PreK & K*; 45 minutes) - Discover how birds use their special adaptations.

Animals Prepare for Winter (*PreK & K; 45 minutes; Nov.-Jan.*) - Learn what animals are doing to prepare for the cold winter months.

Furries (K; 1 hour) - Explore furs in this hands-on program about mammals and their characteristics.

Ants Ants (*K & 1*st *grade; 1 hour)* - Investigate insects by studying an ant hill. The program includes a demonstration of various ant jobs, general insect parts, and more.

Happening Herps $(K-2^{nd} grades; 1 hour)$ - Learn the difference between reptiles and amphibians. Live animals are a part of this hands-on program.

My Woods (1st grade; 1 hour) - Explore a special habitat by using your senses. Learn why the outdoors are an important place for animals and people.

Who Goes There? (1^{st} & 2^{nd} grades; 1 hour) - Be an animal detective! Learn to read the many signs left behind by animals to solve the mystery of "Who Goes There?"

Ancient Animals $(2^{nd} grade; 1 hour)$ - Discover what ancient animals lived in Iowa, extinction theories for Ice Age mammals, and what scientists learn from fossils. Students will make a fossil to keep.

Animal Adaptations (2^{nd} grade; 1 hour) - Understand the components of habitat, identify Iowa habitats, define adaptations, and discover how adaptations allow animals to live in a particular habitat.

The Garbologist $(3^{rd} grade; 1 hour)$ - This interactive and wacky program introduces students to the garbage cycle. Learn what we throw away, where it goes, and what we can do to reduce garbage.

Dr. Dirt $(3^{rd} grade; 1 hour)$ - Let Dr. Dirt teach you about Iowa's million dollar soils through this interactive program.

Raptors $(3^{rd} grade; 1 hour)$ - Learn about raptors and their special adaptations that allow them to function and survive. If available, we will bring a live raptor.

Wonders of Weather (3^{rd} & 4^{th} grades; 1.25 hours) - Learn the components of weather through hands-on learning stations.

Rock It (3rd & 4th grades; 1 hour) - Explore the three processes that form rocks.

Skins and Skulls $(3^{rd} & 4^{th} grades; 1 hour)$ - Look at mammal teeth to determine what they eat and identify eight common mammals by their skull and fur.

Shocking Developments (4^{th} grade; 1.25 hours; Nov.-March) - It's a shock where electricity can be found in nature! Learn all about electricity and do some amazing, hands-on experiments.

Digestion Discoveries (4th grade; 1 hour) - We will compare how monogastrics, ruminants, avians, and hind-gut fermenters process their food.

Team Building (4^{th} & 5^{th} grades; 1 hour; August) - Team building is a fun, interactive way to get to know your class as a whole and as individuals. This program will challenge your students to think as a group and communicate with one another as a team. Because this program is meant to prepare you and your class for the year to come, it is offered during the first few weeks of school.

Endangered Species (4^{th} & 5^{th} grades; 1.25 hours) - Understand why animals become endangered and discover ways to help them.

Circulation Spectacular! $(4^{th}$ - 6^{th} grades; 1 hour) - Explore the circulatory systems of various animals. A dissected fish and mammal heart will be brought into the classroom. If you want the full "hands-on" experience, please provide examination gloves for your students.

Biomes (4th-6th grades; 1.5 hours) - Closed for remodeling, will return next year.

Fabulous Fossils (4^{th} - 6^{th} grades; 1.25 hours) - What was Iowa like 400 million years ago? This program explores Iowa's geologic history.

Dem Bones (5th grade; 1 hour) - Learn with games and puzzles the bones and skeletal systems of different vertebrates. Explore the unique similarities among them all.

Traveling Trunk (5^{th} grade; 1.5 hours) - Meet a pioneer woman and learn about her move west and life on the prairie in the 1860s.

Nature Inventions (5^{th} - 8^{th} grades; 1 hour) - Great inventors and inventions come alive with an interactive game exploring how nature has had a hand in everything.

Enviroscape (5^{th} & 6^{th} grades; 1 hour) - Hands-on learning about water pollution connects what we do on land to what happens in our rivers, lakes, and oceans.

Outdoor Experiences

Note: Two half-day outdoor experiences can be combined for a full-day experience.

Discovery Hike (All grades; 1-2 hours; Sept.-May) - Spontaneous interpretation. Nature only knows what we will find.

I Spy (*PreK*; 45 minutes; Oct.-Nov. & late April-May) - Explore nature using letters, colors, and numbers.

Nature Detectives (*K*; 1.5 hours; late April-May) - Using their senses to uncover clues, "detectives" will investigate the forest through hands-on observation.

Plant Parts and Pollination (1st grade; 1.5 hours; Sept.-Oct. & late April-May) - Learn about plant parts and life cycles, pollination, and how animals interact with a forest plant community.

Insectology (1st & 3rd grade; 1.5 hours; Sept.-Oct. & May) - Learn the characteristics of insects, their survival strategies, and collect insects to observe and identify.

Pond Study (2nd grade; 9:00 AM -2:30 PM; May) - A lake is an amazing habitat full of critters. Students will learn about the food chain and use nets to explore and discover pond life.

Tree-rific! (2nd grade; 2.5 hours; October) - Students learn about the inner workings of trees, their benefit to wildlife, and tree identification.

Prairies (3rd grade; 2.5 hours; Sept.-Oct.) - Through hands-on discovery, students learn about Iowa's once vast prairies and their animal inhabitants.

Birding Bonanza (3^{rd} grade; 2.5 hours; late April-May) - Students scour different habitats to learn about bird adaptations, practice using binoculars, and identify birds by sight and call.

Naturally Sensational $(3^{rd}-4^{th} grades; 2.5 hours; Sept.-May)$ - Discover how local organisms use their senses to survive within their habitats. A series of hands-on experiments, a naturalist-led hike, and journaling make this program "Naturally Sensational."

GPS and Geocaching (4th grade; 2.5 hours; Oct.-May) – Understand how to use a GPS to find a location based on latitude and longitude, find a location using new coordinates, and learn the sport of geocaching.

Service Learning (4th grade & up; half or full-day; Sept.-May) - Help your students learn the importance of giving back to the community through volunteerism. Many of our county areas need help! Your class can help remove invasive species or collect prairie seed. The service project will depend on the season and the time will depend on the activity.

Pioneer Day (5th grade; 9:00 AM-2:30 PM; late April-May) - Students travel back to 1869. Attending school, making soap, and doing laundry are a few of the hands-on activities offered. *Prerequisite:* Traveling Trunk in-class program.

Hatchet (5th grade; 2.5 hours; Oct.-May) - After your students finish reading Hatchet or another wilderness survival-based book, bring them to McFarland Park to experience survival-shelter and fire building. Tell us which book you will read.

Outdoor Day (5^{th} & 6^{th} grades; 9:00 AM-2:30 PM; September or May) - Canoeing, orienteering, and team building are taught at Hickory Grove Park.

Ice Fishing (5^{th} & 6^{th} grades; 2.5 hours; Jan.-Feb.) - Ice fishing is a great way to spend a winter day. After learning about equipment, techniques, and safety, students will venture onto the ice to catch fish.

Preschool & Lower Elementary Nature Tubs

Tubs can be checked out for two weeks. They must be picked up and returned during business hours to the Conservation Center at McFarland Park, 56461 180th St., Ames, IA unless other arrangements are made.

To reserve a tub, contact Story County Conservation at 515-232-2516, Monday-Friday, 8:30 AM - 4:30 P.M. or email at conservation@storycounty.com.

Different tubs contain background information, materials, and activities, including puzzles, crafts, finger plays, poems, felt boards, snack ideas, and a bibliography. These subject tubs are offered:

Camouflage: types of camouflage, insect camouflage, and monarch butterflies

Creatures of the Night: night-time animal adaptations, bats, owls, and nocturnal insects

Dirt: soil, worms, insects, and seed types and formation

Honeybees: bee characteristics and behavior, parts of a beehive, and how honey is made

Ice Age Mammals: shape recognition, ordering, alphabetizing, comparing, glaciers, survival techniques, cultures of early people, tools of paleontologists and archaeologists

Pond Habitat: life in the pond, including tadpoles, frogs, insects, and ducks

Prairie Habitat: prairie insects, grasses, and flowers

Rocks & Fossils: rock types, rock formation, and fossils

Woods Habitat: parts of a tree, leaf shape, and woodland animals

Fees are assessed to schools and day cares scheduling environmental education programs and outdoor experiences. Two options are offered, to be decided in advance:

- 1. For multiple programs, the fee is \$1.25 per student enrolled in the school attendance center.
- 2. For individual programs, the fee is \$1.25 per student per program (minimum charge of \$20).

To schedule in-class programs or outdoor experiences, contact the environmental education coordinator Monday through Friday, 8:30 AM to 4:30 P.M., at 515-232-2516 or email conservation@storycounty.com.

If we don't have what you are looking for, let us know. We may be able to create a program or field trip for your class.